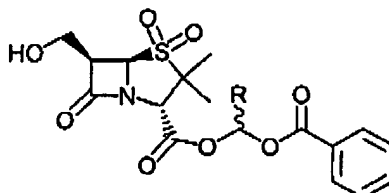


Patent Appln. No. 10/648,408
Atty. Docket No. PC 23296A

IN THE CLAIMS

Claims 1-20 (canceled without prejudice or disclaimer).

21. (new) A compound selected from the compounds having the structure:

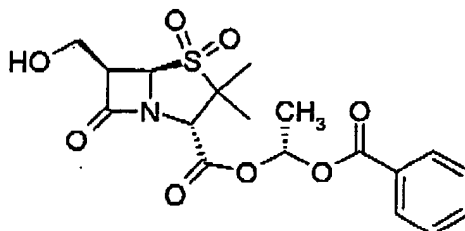


wherein R is H or methyl, wherein the compound may be in the form of a solvate.

22. (new) A compound of claim 21 selected from:

- (a) 4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-(hydroxymethyl)-3,3-dimethyl-7-oxo-, (1R)-1-(benzoyloxy)ethyl ester, 4,4-dioxide, (2S,5R,6R)-;
- (b) 4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-(hydroxymethyl)-3,3-dimethyl-7-oxo-, (1S)-1-(benzoyloxy)ethyl ester, 4,4-dioxide, (2S,5R,6R)-; or
- (c) 4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-(hydroxymethyl)-3,3-dimethyl-7-oxo-, (benzoyloxy)methyl ester, 4,4-dioxide, (2S,5R,6R)-.

23. (new) The compound of claim 21 having the structure:



which may be in the form of a solvate.

24. (new) A composition comprising a mixture of at least (a) 4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-(hydroxymethyl)-3,3-dimethyl-7-oxo-, (1R)-1-(benzoyloxy)ethyl ester, 4,4-dioxide, (2S,5R,6R)-; and (b) 4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-(hydroxymethyl)-3,3-dimethyl-7-oxo-, (1S)-1-(benzoyloxy)ethyl ester, 4,4-dioxide, (2S,5R,6R)-, wherein the mixture may be in the form of a solvate.

25. (new) A composition comprising at least one compound of claim 21 in combination with at least one beta-lactam antibiotic.

26. (new) A composition comprising at least one compound of claim 21 in combination with amoxicillin.

27. (new) A composition comprising the compound of claim 23 in combination with at least one beta-lactam antibiotic.

28. (new) A pharmaceutical composition comprising at least one compound of claim 21 in combination with at least one beta-lactam antibiotic, with or without one or more pharmaceutically acceptable excipients.

29. (new) A method of treating bacterial infection comprising administering, to a mammal in need, (1) at least one compound of claim 21 and (2) at least one beta-lactam antibiotic in amounts such that the combination of (1) and (2) is effective.

30. (new) A method of treating bacterial infection comprising administering, to a mammal in need, (1) the compound of claim 23 and (2) a beta-lactam antibiotic in amounts such that the combination of (1) and (2) is effective.

31. (new) A method of treating bacterial infection comprising administering, to a mammal in need thereof, a therapeutically effective amount of a pharmaceutical composition comprising:

(a) 4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-(hydroxymethyl)-3,3-dimethyl-7-oxo-, (1R)-1-(benzoyloxy)ethyl ester, 4,4-dioxide, (2S,5R,6R)-, which may be in the form of a solvate; and

(b) a beta-lactam antibiotic.

32. (new) A method for increasing the effectiveness of a beta-lactam antibiotic comprising administering, to a mammal in need, the beta-lactam antibiotic and an effectiveness-increasing amount of at least one compound of claim 21.

33. (new) A method for increasing the effectiveness of a beta-lactam antibiotic comprising administering, to a mammal in need, the beta-lactam antibiotic and an effectiveness-increasing amount of the compound of claim 23.